

State of Wisconsin Joint Solicitation of Groundwater and Related Research/Monitoring Proposals for Fiscal Year 2006

Proposal Number: 06-GSI-08

Title: Identification and characterization of springs in west-central Wisconsin

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Abstract: Springs with high discharge rates may be an important source of water supply for both municipal utilities and h Identification and characterization of springs are important components of water management in many drainage basins. Springs with high discharge rates may serve as sources of public water supply, provide significant recharge to streams, or sustain protected ecosystems. In some areas, recent population growth or economic development has increased local demand for water supplies; additional water is often provided through high capacity pumping wells. When these wells are located within the source area of springs, the discharge rate of springs can be significantly reduced, sometimes resulting in surface water degradation or a reduction in surface water recharge. Currently, insufficient data exist to accurately assess the impacts of high capacity wells on spring discharge rates for much of Wisconsin. This project will investigate the location, flowrate, and likely recharge area of springs in west-central Wisconsin, thus providing a portion of a statewide spring database. The project will also provide data for groundwater modeling in west-central Wisconsin, allowing predictive assessment of the impacts of high capacity wells on spring discharge and providing insight into spring recharge mechanisms.

Work Location: St. Croix County, Wisconsin

Year 1 Budget: (2005-2006) \$21,686